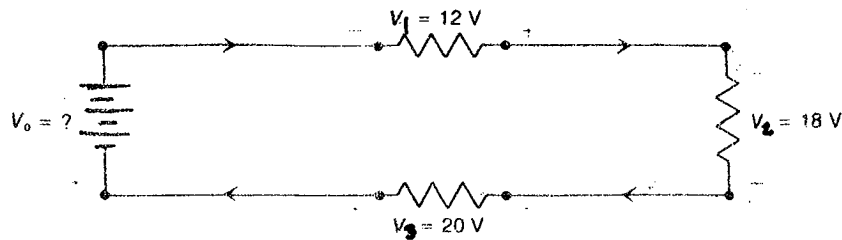
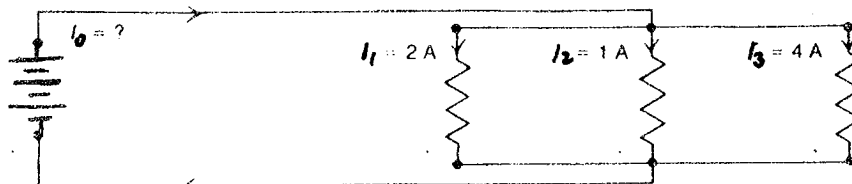


Practice

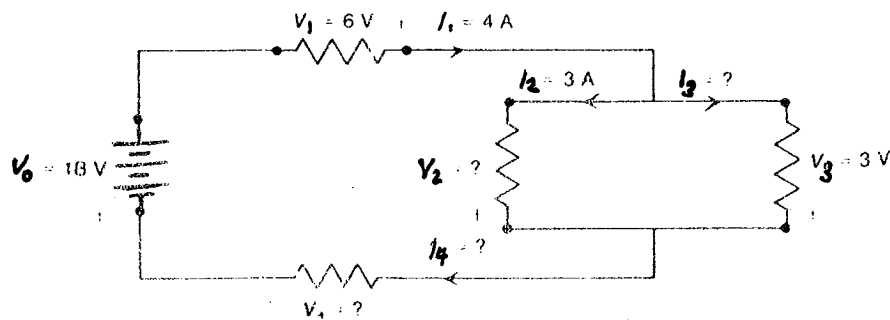
1. Find V_0 in this circuit: (50 V)



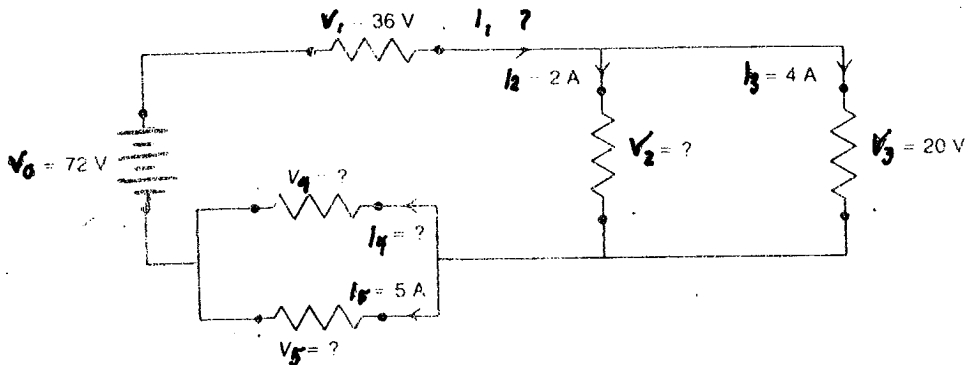
2. Find I_0 in this circuit: (7 A)



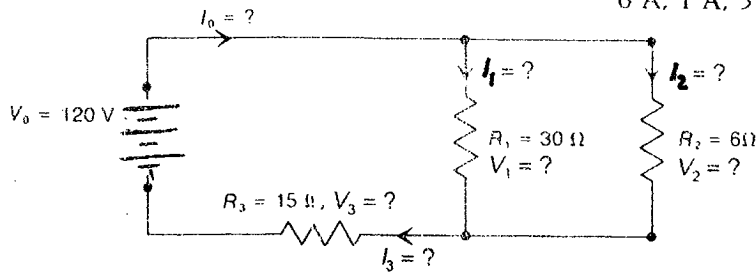
3. Find V_2 , V_4 , I_3 , and I_4 in this circuit: (3 V, 9 V, 1 A, 4 A)



4. Find V_2 , V_5 , V_4 , I_1 , and I_4 in this circuit: (20 V, 16 V, 16 V, 6 A, 1 A)



5. In this circuit, find V_1 , V_2 , V_3 , I_0 , I_1 , I_2 , and I_3 . (30 V, 30 V, 90 V, 6 A, 1 A, 5 A, 6 A)



8. Refer to the schematic diagram shown in Figure 21-29. Some values are given. Calculate the values of I_1 , I_3 , and V_4 .

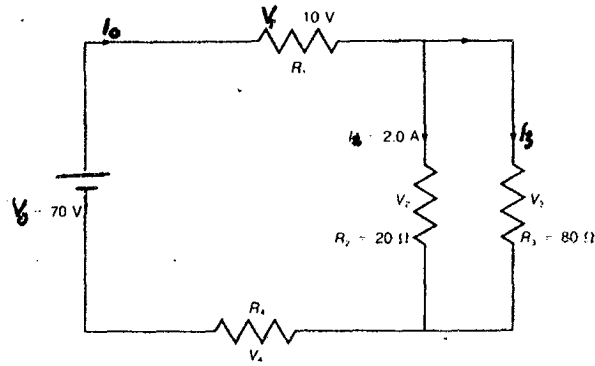


Fig. 21-29 Calculate I_1 , I_3 , and V_4 .

7. Figure 21-30 shows a circuit containing five resistors that are all equal to $20\ \Omega$. When the switch is closed, calculate
- the total resistance of the circuit.
 - the total current in the circuit.

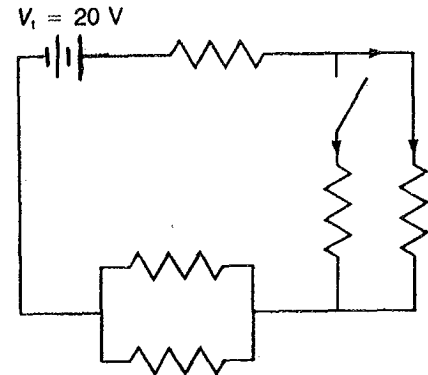


Fig. 21-30 Five resistors in a circuit

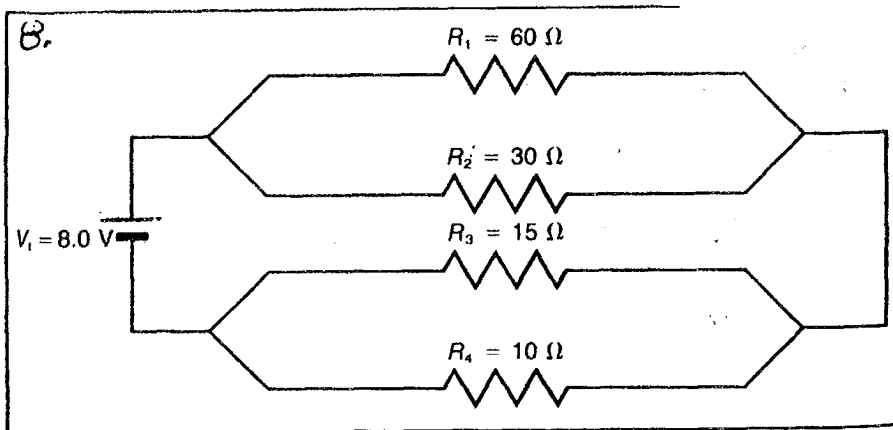


Fig. 21-14 What information can you find from this diagram?

9. Answer the following questions using Figure 21-31.
- What is the total resistance of the circuit?
 - What is the total current flowing?
 - What current flows through resistors R_1 and R_4 ?
 - What is the potential difference across resistor R_3 ?

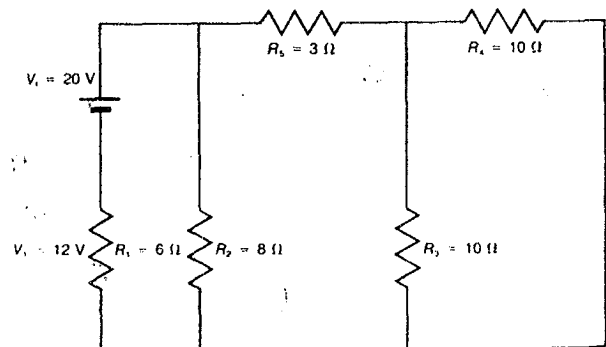


Fig. 21-31 Find the missing values of current and electric potential difference.

10. Refer to Figure 21-33.

- What is the total resistance of the circuit?
- What current flows through the $2\ \Omega$ resistor?
- What is the potential difference across the $15\ \Omega$ resistor?
- What is the power dissipated by the $30\ \Omega$ resistor?

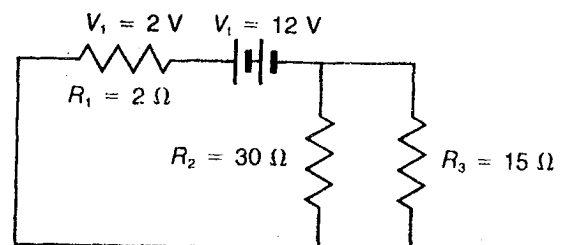


Fig. 21-33 A three-resistor circuit